



PATENT
Attorney Docket No. 218654
DHHS Ref. No. E-087-96/2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Chamberlain et al.

Application No. 09/838,987

Art Unit: 1632

Filed: September 6, 2002

Examiner: Wilson, M.

For: HETEROLOGOUS
BOOSTING IMMUNIZATION

TECH CENTER 1600/2800
NOV 14 2002

RECEIVED

PENDING CLAIMS AS OF NOVEMBER 6, 2002

1. (Thrice Amended) A method for inducing an immune response against at least one antigen of an infectious disease, an autoimmune disease, a viral infection, a bacterial infection, a fungal infection, a cancer, or a foreign peptide fragment in a mammal, which method comprises:

- (i) inoculating the mammal with a first recombinant vector comprising a nucleic acid insert encoding at least one antigen of the infectious disease, autoimmune disease, viral infection, bacterial infection, fungal infection, cancer or foreign peptide fragment against which an immune response is to be induced; and
- (ii) inoculating the mammal with a second recombinant vector comprising a nucleic acid insert encoding at least one antigen of the infectious disease, autoimmune disease, viral infection, bacterial infection, fungal infection, cancer or foreign peptide fragment against which an immune response is to be induced, wherein the second DNA vector is different from the first DNA vector and wherein at least one antigen encoded by the insert of the first recombinant vector is encoded by the insert of the second recombinant vector, whereupon an immune response against at least one antigen of the infectious disease, autoimmune disease, viral infection, bacterial infection, fungal infection, cancer or foreign peptide fragment is induced in the mammal.

2. The method according to claim 1, wherein the first recombinant vector is a recombinant vaccinia viral vector.
3. The method according to claim 1, wherein the first recombinant vector is a recombinant fowlpox viral vector.
4. The method according to claim 1, wherein the first recombinant vector is a recombinant adenoviral vector.
5. (Thrice Amended) The method according to claim 1, wherein the insert of the recombinant vector further comprises a nucleic acid encoding an immunostimulatory protein other than an antigen of the infectious disease, autoimmune disease, viral infection, bacterial infection, fungal infection, cancer or foreign peptide fragment against which an immune response is to be induced.
6. The method according to claim 1, wherein the second recombinant vector is a recombinant vaccinia viral vector.
7. The method according to claim 1, wherein the second recombinant vector is a recombinant fowlpox viral vector.
8. The method according to claim 1, wherein the second recombinant vector is a recombinant adenoviral vector.